Application No.: 10/037,800   Docket No.: 16159/035001; P6566

AMENDMENTS TO THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) A method for conveying a security context, comprising:

~~creating and assigning~~ obtaining a virtual address [[to]] associated with a ~~client~~ process executing on a recipient computer system, ~~wherein the virtual address is associated with a recipient address of a recipient computer system~~;

issuing a first Internet Protocol version compliant packet, wherein the first Internet Protocol version compliant packet comprises a security context, wherein the security context comprises a Supernet identifier, a Channel identifier, and the virtual address, and wherein data in the first Internet Protocol version compliant packet is encrypted using the ~~security context~~ Supernet identifier and the Channel identifier;

prepending an issued packet with a second Internet Protocol version header producing a second Internet Protocol version compliant packet, wherein the first Internet Protocol version is different ~~than~~ from the second Internet Protocol version; and

forwarding the second Internet Protocol version compliant packet to [[a]] the recipient computer system[[;]].

~~stripping away the second Internet Protocol version compliant header from the second Internet Protocol version compliant packet producing a stripped packet at the recipient;~~

~~decrypting and authenticating data within the stripped packet using a particular method as indicated by the security context producing a decrypted and authenticated packet; and~~

~~routing the decrypted and authenticated packet to a recipient process using the virtual address.~~

6

Application No.: 10/037,800   Docket No.: 16159/035001; P6566

2. (Original) The method of claim 1, wherein the first Internet Protocol version compliant packet is Internet Protocol version 6 compliant packet.

3. (Original) The method of claim 1, wherein the second Internet Protocol version compliant packet is Internet Protocol version 4 compliant packet.

4. (Currently Amended) The method of claim 1, wherein issuing the first Internet Protocol version compliant packet further comprises:

> executing invoking a Supernet Attach Command with on an authentication server daemon;
>
> responding receiving, in response to the Supernet Attach Command, with a Supernet configuration information comprising the security context in the address; and
>
> registering a mapping of the Supernet configuration information with a virtual address daemon.

5. (Cancelled)

6. (Currently Amended) The method of claim [[5]] 1, wherein the security context comprises a 128 bit unique value.

7. (Currently Amended) The method of claim 6, wherein the security context 128 bit unique value comprises a 16 bit set and a 112 bit set.

8. (Original) The method of claim 7, wherein the 16 bit set denotes a site local Internet protocol address comprising 12 bits for an address prefix followed by 4 bits for a zero value.

9. (Original) The method of claim 7, wherein the 112 bit set comprises contiguous bits for the Supernet identifier, the Channel identifier, and the virtual address.

10. (Original) The method of claim 7, wherein the 112 bit set comprises a 64 bit Supernet identifier, a 24 bit Channel identifier, and a 24 bit virtual address.

7

Application No.: 10/037,800   Docket No.: 16159/035001; P6566

11. (Original) The method of claim 4, wherein the virtual address daemon maps the virtual address of the recipient process within the Supernet to an actual Internet protocol address.

12. (Cancelled) – 29. (Cancelled)

30. (New) A method for processing a security context, comprising:

> receiving a first Internet Protocol version compliant packet encapsulated by a second Internet Protocol version compliant packet, wherein the first Internet Protocol version compliant packet comprises encrypted data and a security context, wherein the security context comprises a virtual address, a Supernet identifier, and a Channel identifier;

> extracting the encrypted data and the security context from the first Internet Protocol version compliant packet encapsulated by the second Internet Protocol version compliant packet;

> decrypting the encrypted data in the first Internet Protocol version compliant packet using the Supernet identifier and Channel identifier to obtain decrypted data; and

> routing the decrypted data to a process in the recipient computer system using the virtual address.

31. (New) The method of claim 30, wherein the security context comprises a 128 bit unique value.

32. (New) The method of claim 31, wherein the 128 bit unique value comprises a 16 bit set and a 112 bit set.

33. (New) The method of claim 32, wherein the 16 bit set denotes a site local Internet protocol address comprising 12 bits for an address prefix followed by 4 bits for a zero value.

34. (New) The method of claim 32, wherein the 112 bit set comprises contiguous bits for the Supernet identifier, the Channel identifier, and the virtual address.

8

Application No.: 10/037,800   Docket No.: 16159/035001; P6566

35. (New) The method of claim 32, wherein the 112 bit set comprises a 64 bit Supernet identifier, a 24 bit Channel identifier, and a 24 bit virtual address.

36. (New) The method of claim 30, wherein the security context is obtained from first Internet Protocol version compliant packet using a handler mechanism.

37. (New) The method of claim 34, wherein the handler mechanism is a Netfilter.